

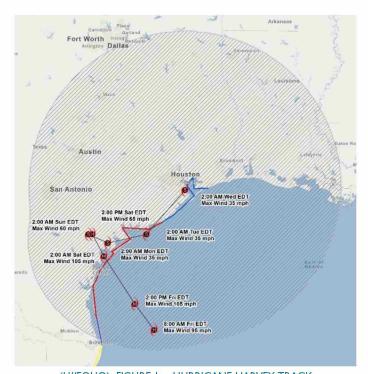
National Protection and Programs Directorate
Office of Cyber and Infrastructure Analysis (OCIA)
Infrastructure Impact Assessment

(U) Hurricane Harvey: Infrastructure Impact Assessment: Transportation Systems, 1930 EDT 25 August 2017

(U) Assessment

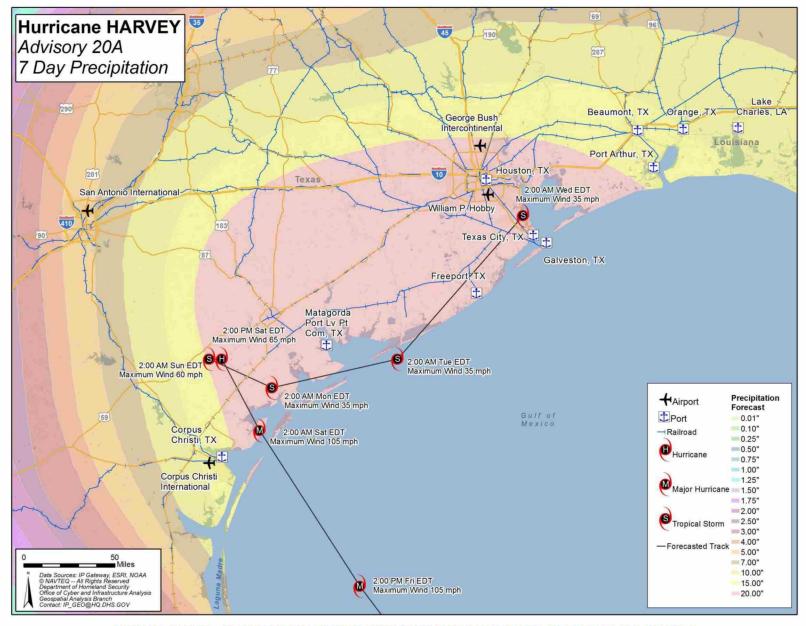
- (U) OCIA assesses that most transportation systems in the affected area will cease operations during the storm and that recovery efforts may take days to weeks, depending on the level of damage and restoration priorities. Transportation disruptions may cause a short-term interruption in local supply chains. Affected supply chains will likely recover as the storm passes, with no long-term impacts to supply chains anticipated.
- (U) Limited-to-moderate physical damage is anticipated to port facilities along the Texas Coast—the center of U.S. imports and exports of crude oil and refined petroleum products. Most port facilities are hardened with berms and flood walls which should protect against storm surge. Seven ports, including the ports of Corpus Christi, Freeport, and Houston, have closed with additional ports potentially closing as the storm moves further north.
- (U) The Coast Guard will survey port waterways following the storm to identify damaged navigational aids and hazardous debris and ensure waterways are clear for vessel traffic. Barge traffic on the Intracoastal Waterway may still be disrupted following the storm due to sediment build-up and debris. Shipping disruptions may be longer than a typical storm because of the likelihood that Hurricane Harvey makes landfall and then heads back into the Gulf of Mexico.
- (U) The Corpus Christi International Airport has been closed and is expected to re-open on 28 August. The George Bush Intercontinental Airport and the William P. Hobby Airport in Houston are experiencing flight delays and cancellations. Potential airport closures are possible as the storm progresses. Airports will reopen once power has been restored and damage to airport facilities has been assessed.
- (U) Flooding could wash out rails, damage rail yards, and take days to weeks to repair. Rail yards prone to flooding have likely been cleared of rail cars. Rail covered by debris will be inoperable until cleared. Freight rail companies will divert trains, localizing any disruptions to freight shipments. Rail yards can operate manually if power is not available.
- (U) Highways and roads may become impassible due to debris or floodwaters. Storm surge and floodwaters can also be heavily damaged and wash out roads and bridges, potentially impacting local traffic for days or weeks following the storm. Flooding on major routes will force traffic onto alternate routes with less capacity, creating the potential for increased congestion.

(U) The below contents are UNCLASSIFIED//FOR OFFICIAL USE ONLY.



(U//FOUO) FIGURE I— HURRICANE HARVEY TRACK

(U) The below contents are UNCLASSIFIED//FOR OFFICIAL USE ONLY



(U//FOUO) FIGURE 2—TRANSPORTATION SYSTEMS ASSETS IN HURRICANE HARVEY'S TRACK AS OF 0800 EDT AUGUST 25

OMB Control No.: 1670-0027 Expiration Date: 10/31/2017

UNCLASSIFIED



National Protection and Programs Directorate

NPPD Customer Feedback Survey

2. Please rat	e your satisfa	action with each of Very Satisfied (5)	the following: Somewhat Satisfied (4)	Neither Satisfied Nor Dissatisfied (3)	Somewhat Dissatisfied (2)	Very Dissatisfied (1)
Timeliness of product		0	0	0	0	0
Relevance of product		0	0	0	0	0
3⊞RZ ŒŒÇR	X XVH WKIV SU	RGXFVIQIVXSSRUVRI	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			
Yes No Yes No Yes No Yes No A. Do you have	If so, which pused content of so, which pused content of so, which puses (pused of so, which pused of so, which puse	oroducts? Its to improve my overforts? Ents with government ourtners? Delease specify) Ithat this product dispersed to the second output the second outp	vn organization's s nt, private sector,	mation or analytic produ ecurity or resiliency effo or other partners		
6. Would you Yes No 7. Are there	this product like to see m (Please	or questions you wo		ure products, please provide	(OPTIONAL):	
Name Organization Contact Number			Sector Partner Type State	Select One Select One		SUBMIT FORM

Paperwork Reduction Act Compliance Statement